



## NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformance

for Weighing and Measuring Devices

**For:**

Weighing/Load Receiving Element  
 Digital Electronic  
 Models: EH Series (see below)  
 $n_{\max}$ : 5000  
 $e_{\min}$ : 0.2 lb / 0.1 kg (see below)  
 Capacity: 1000 to 10 000 lb / 440 to 4400 kg (see below)  
 Platform: 4 ft x 4 ft (see below)  
 Accuracy Class: III

**Submitted By:**

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**Standard Features and Options**

Model	Capacity x d (lb)	Capacity x d (kg)	Load Cell
EH-144	1000 x 0.2 *	440 x 0.1	SE-CG-23 0.5K lb $v_{\min}$ 0.075 lb
EH-244	2000 x 0.5	880 x 0.2	SE-CG-23 1.0K lb $v_{\min}$ 0.14 lb
EH-2.544	2500 x 0.5	1000 x 0.2	SE-CG-23 1.5K lb $v_{\min}$ 0.21 lb
EH-344	3000 x 1.0	1320 x 0.5	SE-CG-23 1.5K lb $v_{\min}$ 0.21 lb
EH-444	4000 x 1.0	1760 x 0.5	SE-CG-23 2.0K lb $v_{\min}$ 0.28 lb
EH-544	5000 x 1.0 *	2200 x 0.5	SE-CG-23 2.5K lb $v_{\min}$ 0.35 lb
EH-1044	10 000 x 2.0 *	4400 x 1.0	SE-CG-23 5.0K lb $v_{\min}$ 0.70 lb

\*Capacities tested

Platform: Device evaluated 4 ft x 4 ft. The device may have platform areas up to but not larger than evaluated (16 sq ft), with lengths or widths no greater than 125 percent of either dimension tested. (e. g. 5 ft x 3 ft)

**Construction:**

- Mild Steel or Stainless Steel

**Load Cell:**

- Four load cells per device
- Junction Box
- Load Cells used are Coti Global Sensors Manufacturing, Model SE-CG-23 Series (NTEP CC 08-074), or NTEP certified metrological equivalent

Temperature Range: -10 °C to 40 °C (14 °F to 104 °F)

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of "NIST Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Jerry Buendel  
 Chairman, NCWM, Inc.

Ronald Hayes  
 Chairman, National Type Evaluation Program Committee  
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## Cardinal Scale Manufacturing Company

Weighing/Load Receiving Element / EH Series

**Application:** General purpose weighing/load receiving element when connected to a certified and compatible indicating element.

**Identification:** The metal identification badge is riveted to the side of the platform.

**Sealing:** The load receiving element has no metrological functions that require the use of a security seal. Calibration and configuration of the scale are done through the indicator and sealed according to the manufacturer's instructions for the particular indicator used. Additionally, the load cell junction box can be sealed with a wire security seal threaded through two screws in the cover.

**Test Conditions:** This Certificate is issued based upon the following tests and upon information provided by the manufacturer. Three capacities (10 000 x 2 lb, 5000 x 1 lb and 1000 x 0.2 lb) with a 4' x 4' platform were submitted for evaluation. The weighing/load receiving elements were interfaced with Transcell Technology indicating elements, Model Number TI-500E (NTEP Certificate of Conformance Number 94-080A2). The emphasis of the evaluations was on the device design, marking requirements, operation, durability, compliance with influence factor requirements and performance. The 1000 lb device was tested in an NTEP laboratory over a temperature range of -10°C to 40°C (14°F to 104°F). Several increasing/decreasing load tests and shift tests were also performed. The 5000 and 10 000 lb devices were tested at a field site. Several increasing/decreasing load tests and corner shift tests were conducted using certified weights during the initial evaluation. After conducting the initial evaluation, appropriate permanence criteria was met, after which the device was subjected to the same tests conducted during the initial evaluation.

**Evaluated By:** T. Davis (KS); S. Boyd (CA)

**Type Evaluation Criteria Used:** NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2015. NCWM, Publication 14: Weighing Devices, 2015.

**Conclusion:** The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

**Information Reviewed By:** J. Truex (NCWM)

**Example of Device:**

